

Order ID 64953

January 04, 2011 3:09:35 PM



Page 1

Item ID: D350-636-016

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 1/4/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 1/14/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

RP

Date:

1-01-11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4168	A
IIN-D350-636	H

0.00

100



DOCUMENT CONTROL

DC

0.00

Document Control

Memo

Photocopy blue file and type labels per PPP D350-636-016 CHG 001

N/A



Work Order ID 64953

Tuesday, January 04, 2011 3:09:35 PM

Page 2

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Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.

4- Locate DT8530 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill fwd step holes using DT9616. Ensure proper positioning. All holes as per dwg D4168

6- Drill pilot holes as per Dwg D4168 sheet 5 (D4168-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail K)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail K.
SECOND SIDE

8-Open up holes for Detail K to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D4168. Open up holes for ground handling and detail C to 0.500" (8 holes per side)

9-Open up holes of Detail J to 0.297" (total of 2 holes per side) +.201 iplace per side

10-Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left

11.01.07
perm. chg.

1 0 8E11/01/07

Work Order ID 64953

Tuesday, January 04, 2011 3:09:35 PM



Page 3

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

from bending as per QSI 004
A/R Aluminum Rod batch: M115778

11-Grind welds flush as per Dwg D4168

120



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

0.00

Memo

8/11/07

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Memo

8/11/07

H

Work Order ID 64953

Tuesday, January 04, 2011 3:09:35 PM



Page 4

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1 0 BE 11/6/10

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

DP 11-1-19

Work Order ID 64953

Tuesday, January 04, 2011 3:09:35 PM



Page 5

Item ID: D350-636-016

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

0.00



Skidtubes

0.00

Skidtubes

Memo

1-Open up holes of Detail L and ground handling to 0.625" (total of 8 holes per side)
as per dwg D4168.

2-Open up holes of Detail K to 0.750" (total of 4 holes per side)
as per dwg D4168.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail K,L, ground handling and float holes per dwg D4168
(welding instructions on sheet 9)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R ☐ ☐ Sikaflex-291 batch: M116040 ☐ ☐
exp. date: 07/2011

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 & QSI004
(welding instructions on sheet 8)

A/R ☐ ☐ Aluminum Rod batch: M116577

9- At section AP-AP drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D4168

BE 1/01/11
BE 1/01/19

Work Order ID 64953

Tuesday, January 04, 2011 3:09:35 PM



Page 6

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Spot face ground handling holes section (total of 4 places per side) as per
dwg D4168

12- C'bore section CH-CH

13- Deburr holes

3 BE 11/01/19

170



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

Sub 0119

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Sub 0119

(40)

Work Order ID 64953

Tuesday, January 04, 2011 3:09:35 PM



Page 7

Item ID: D350-636-016

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

Pressure Wash per QSI005 4.3

0.00

=> M 11/01/26



HandFinish

Memo

0.00

Hand Finishing

✓ Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1 0/

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M115951



Powdercoat

Memo

0.00

Powder Coating

START TIME: 8:30
OVEN TEMPERATURE: 320°
FINISH TIME: 9:00

1 BR 11-01-25.

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Inspect for foreign object per QSI 024

=> M 11/01/26

1 0

Work Order ID 64953

Page 8

Tuesday, January 04, 2011 3:09:35 PM

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

220

0.00



HandFinishing

=> M

11/01/26

0.00

HandFinish

Memo

Hand Finishing

1- Install inserts as per Dwg D4168

230

0.00



HandFinishing

=> M

11/01/26

0.00

HandFinish

Memo

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3" batch: N/A

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168

SIKA FLEX 241

BATCH: 1115114EXP DATE: 11/01

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 11141895-Coat all exposed fasteners with "LPS Procyon" batch: 1114596

Work Order ID 64953

Page 9

Tuesday, January 04, 2011 3:09:35 PM

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Required Date: 1/14/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		8 ulal27		(+)			
250 Packaging Packaging	Pick Kit Memo	0.00 0.00							1/1/278
260 QC Quality Control	QC4- 100% Inspect kits for completeness Memo *****ensure antiseize is on AN8C21A bolts*****	0.00 0.00		8 ulal27		(+)			

Work Order ID 64953

Page 10

Tuesday, January 04, 2011 3:09:35 PM

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Cust Item ID:

Required Date: 1/14/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 	Packaging	0.00	PP 63144			11/1/27	27		
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-636-016 Location: _____ PPP rev: _____								
280 	QC21- Final Inspection - Work Order Release	0.00				11/01/28	28	28	28
QC Quality Control	Memo	0.00							

11/01/27

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

Page 1

10

Work Order ID: 64953



Parent Item: D350-636-016



Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3490-1 		Manufactured	No			160	Each	89.0000	4	4			
Cross Bolt Spacer													

Location Loc Qty Loc Code

LG	89	
59424	3	
62450	56	
64005	30	

BE 11/01/10

D3490-3 		Manufactured	No			160	Each	59.0000	4	4			
Cross Bolt Spacer													

Location Loc Qty Loc Code

LG	59	
60294	1	
62668	6	
63556	30	
64006	22	

BE 11/01/10

AN3C34A 		Purchased	No			230	Each	80.0000	1	1			
BOLT													

Location Loc Qty Loc Code

ST353	80	
115767	10	
116003	20	
116075	50	

BR 11-01-26

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

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Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C36A

Purchased

No

230

Each

141.0000

4

4



BOLT



11/10/2011

Location

Loc Qty

Loc Code

ST353

141

109771

6

116050

50

116239

10

116381

70

116522

5

84

AN3C37A

Purchased

No

230

Each

65.0000

1

1



BOLT



11/12/2011

Location

Loc Qty

Loc Code

ST353

25

114801

1

115908

24

ST354

40

116381

20

116523

20

1

AN3C42A

Purchased

No

230

Each

97.0000

1

1



BOLT



11/12/2011

Location

Loc Qty

Loc Code

ST354

97

106176

97

1

Picklist Print

Page 3

Tuesday, January 04, 2011 3:09:40 PM

Work Order ID: 64953

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Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D3488-042 Manufactured No

230 Each

15.0000

1

1



Blade Fitting Assembly, RH

Location

Loc Qty

Loc Code

FP008

14

59643

4

62003

10

FP18

1

61690

1

x1 BR 11-01-26

D3873-1 Manufactured No

230 Each

273.0000

7

7



Bushing

Location

Loc Qty

Loc Code

ST089

100

64567

100

ST092

170

62197

40

63314

30

64760

100

ST093

3

57615

3

7
11/01/26

Y7

D4154-041 Manufactured No

230 Each

0.0000

1

1



Wearplate Assembly

362711 (x1) 11/01/26

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

Work Order ID: 64953



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Parent Item Name: Skidtube STD w/ Training Wearplates, RH

Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D4170-1 Manufactured No

230 Each

27.0000

4 4



Bushing



BEI 1/11/11

Location

Loc Qty

Loc Code

LG

27

62251

4

62669

1

63322

22

4

D4171-1 Manufactured No

230 Each

11.0000

1 1



Bushing



11/01/12

Location

Loc Qty

Loc Code

ST135

11

62710

11

X1

MS21043-3 Purchased No

230 Each

1,731.000

5 5



Nut



11/01/12

Location

Loc Qty

Loc Code

FG

76

103691

76

ST301

1655

112314

1655

X5

NAS1149C0363R Purchased No

230 Each

5,568.000

9 9



Washer



11/01/12

Location

Loc Qty

Loc Code

ST297

5568

113524

46

113644

22

113889

500

114742

5000

X9

Picklist Print

Page 5

Tuesday, January 04, 2011 3:09:40 PM

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Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased

No

230

Each

340.0000

4

4



WASHER



11/01/26

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

300

111819

66

113362

234

X1

AN960JD816

Purchased

No

250

Each

105.0000

2

2



1/2" washer, Alum



11/01/26

Location

Loc Qty

Loc Code

ST348

105

106043

105

X2

D2744

Manufactured

No

110

Each

32.0000

1

1



Cap



BE 11/01/07

Location

Loc Qty

Loc Code

ST

32

62715

32

1

D2600-3-BENT

Manufactured

No

110

Each

14.0000

1

1



Extrusion Bent



Location

Loc Qty

Loc Code

LG

14

61634

4

62764

1

64434

9

BE 11/01/07

Tuesday, January 04, 2011 3:09:40 PM

Shop Packet Print

Page 5

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

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Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D2743 Manufactured No 160 Each 170.0000 8 8



Crossbolt Spacer



BE 11/13/11

Location Loc Qty Loc Code

LG 170
50281 10
57953 2
59111 10
61844 64
64003 84

D2739 Manufactured No 160 Each 13.0000 1 1



350 I Beam



BE 11/05/11

Location Loc Qty Loc Code

LG 13
62688 3
64448 10

ALS4-1032-225 Purchased No 230 Each 4,124.000 4 4



Insert



ll 11/01/26

Location Loc Qty Loc Code

PK011 4124
110768 4124

D3492-041 Manufactured No 230 Each 97.0000 8 8



Plug Assembly



ll 11/01/26 PTO

Location Loc Qty Loc Code

FP013 97
59114 1
62210 3
63994 93

X 8

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

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Required Date: 1/14/2011



Start Qty: 1.00

Required Qty: 1.00

AN8C35A	Purchased	No	230	Each	44.0000	1	1
							<u>21 11/01/26</u>

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST346	44	
114442	5	
115188	13	<u>XL</u>
115960	26	

AN6C44A	Purchased	No	230	Each	79.0000	4	4
							<u>21 11/01/26</u>

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	2	
103964	2	
ST344	77	
111649	2	
114653	1	
114941	24	
115936	50	<u>XL</u>

MS21083C8	Purchased	No	230	Each	67.0000	1	1
							<u>21 11/01/26</u>

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST303	67	
113845	5	
114934	3	
115594	4	
115884	46	
116289	9	<u>XL</u>

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

Page 8

Work Order ID: 64953

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Start Date: 1/4/2011

Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

D3631-1 Manufactured No

230

Each

201.0000

8

8



Washer



11/01/26

Location

Loc Qty

Loc Code

ST072

201

60755

9

63647

192

AN960C10L Purchased No

NAS1149C0332

230

Each

25.0000

4

4



washer

M 116025



11/01/26

Location

Loc Qty

Loc Code

ST245

25

107534

25

D2745 Manufactured No

230

Each

185.0000

8

8



Bushing



11/01/26

Location

Loc Qty

Loc Code

ST023

185

52311

5

59112

4

61988

68

63315

108

AN960C816L Purchased No

230

Each

0.0000

1

1



WASHER



11/01/26

*

NAS1149C08322R / M114915

Tuesday, January 04, 2011 3:09:40 PM

Shop Packet Print

Page 8

Picklist Print

Tuesday, January 04, 2011 3:09:40 PM

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Start Date: 1/4/2011

Required Date: 1/14/2011



Start Qty: 1.00

Required Qty: 1.00

D3492-043 Manufactured No 230 Each 65.0000 8 8
  Y8 JM 11/01/26
 Plug Assembly



Location Loc Qty Loc Code

FP	2	
54682	2	
FP013	63	
59117	1	
59190	4	B65070
63996	58	<u>X2</u>

AN3C6A Purchased No 230 Each 241.0000 4 4
  JM 11/01/26
 BOLT

Location Loc Qty Loc Code

ST351	241	
<u>111982</u>	166	<u>X4</u>
116419	75	

MS21043-6 Purchased No 230 Each 578.0000 4 4
  JM 11/01/26
 NUT

Location Loc Qty Loc Code

ST301	578	
<u>112314</u>	578	<u>X4</u>

D3493-1 Manufactured No 250 Each 16.0000 2 2
  11/1/27 SP
 Washer

Location Loc Qty Loc Code

ST062	16	
<u>61672</u>	16	<u>2</u>

Picklist Print

Page 10

Tuesday, January 04, 2011 3:09:40 PM

Work Order ID: 64953



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Required Date: 1/14/2011

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

250

Each

67.0000

1

2



11/01/26

NUT

Location

Loc Qty

Loc Code

ST303

67

113845

5

114934

3

115594

4

115884

46

116289

9

x2

AN8C21A

Purchased

No

250

Each

87.0000

2

2



11/01/26

BOLT

Location

Loc Qty

Loc Code

ST345

87

113558

1

114653

2

115723

24

116381

60

x2

D2741

Manufactured

No

250

Each

47.0000

1

1



Blade, 350 Skidtube

Location

Loc Qty

Loc Code

ST466

47

60210

12

61341

35

1 11/01/25

W/O: 64953		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/11/26	230	Assemble D3492-043 "Plugs" with NAS1611-013 "O" Rings M116582	JU	11/01/26	x8		S w/10/26
11/01/26	230	Assemble D3492-041 "Plugs" with DZ594-3 / M161672 "O" rings	JU	11/01/26	x8		S w/10/26

Part No: D350-636-016 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D3488-041	BLADE FITTING, LH
	1			D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
 - BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
 - MINIMUM YIELD TENSILE STRENGTH = 35 KSI
 - MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
- 11) POWDER COATING WITH MEK DEGREASER.
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

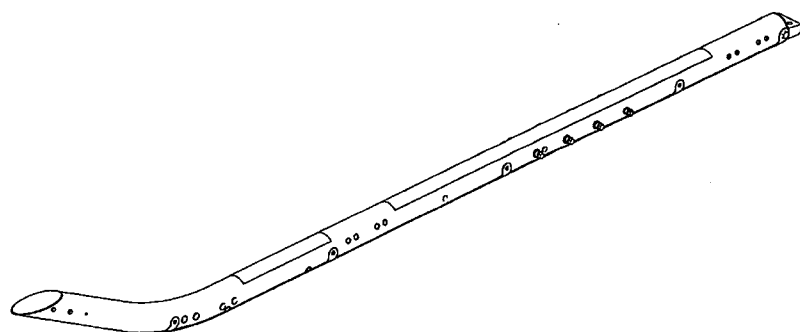
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WITHOUT NOTICE
WORK ORDER
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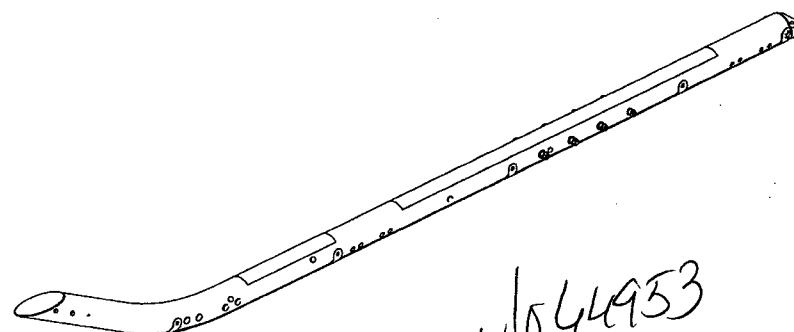
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DE APPR.			
DATE	10.08.09		

DART AEROSPACE USA, INC.	
PORT HADLOCK, WA	
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D4168	SHEET 1 OF 11
TITLE	SCALE
350 SKIDTUBE ASSEMBLY	NTS

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D4168-041 350 SKIDTUBE ASSEMBLY, LH

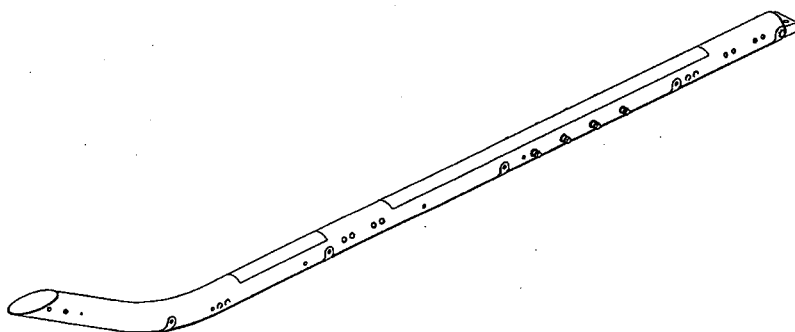


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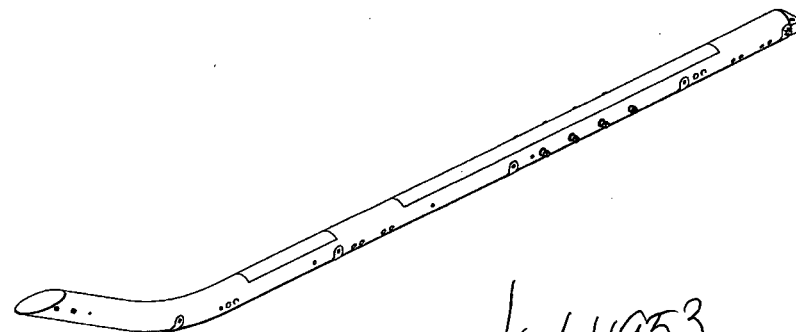
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MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 2 OF 11
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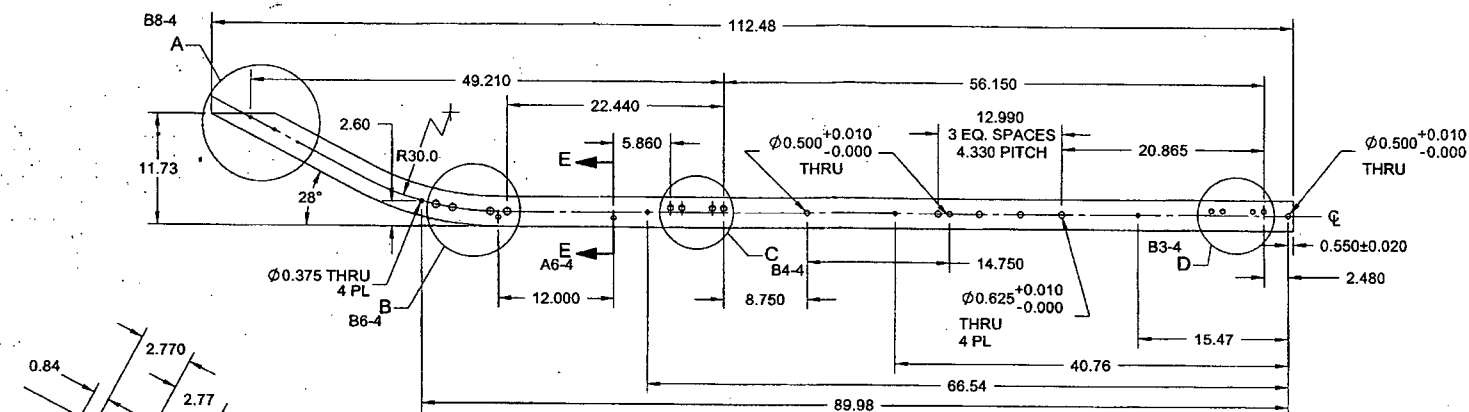


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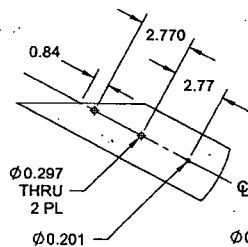
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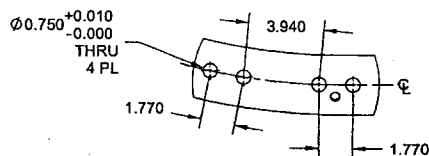
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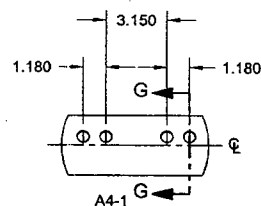
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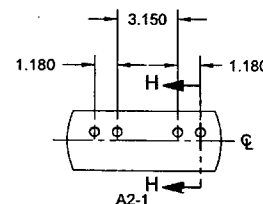
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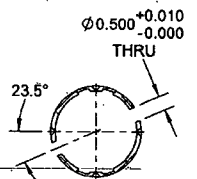
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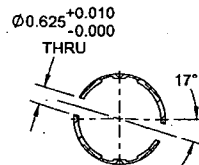
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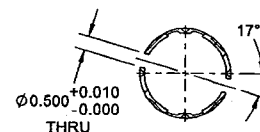
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SCALE 2X



SECTION E-E
SCALE 3X, 2 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

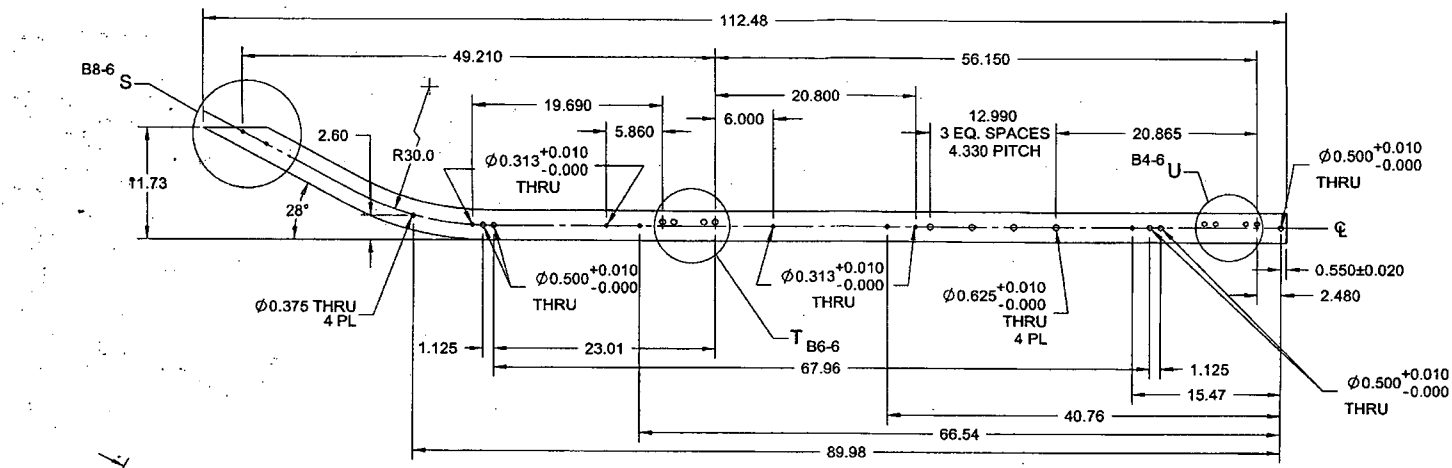
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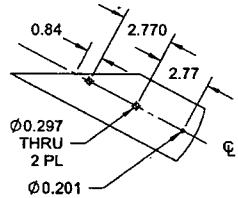
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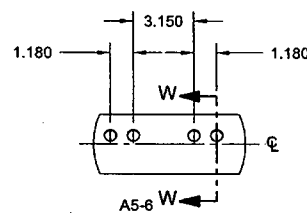
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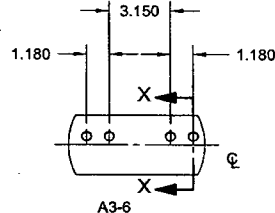
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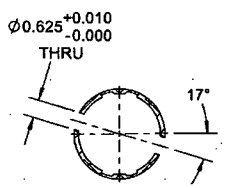
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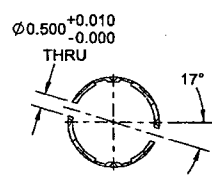
DETAIL T
SCALE 2X



DETAIL U
SCALE 2X



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

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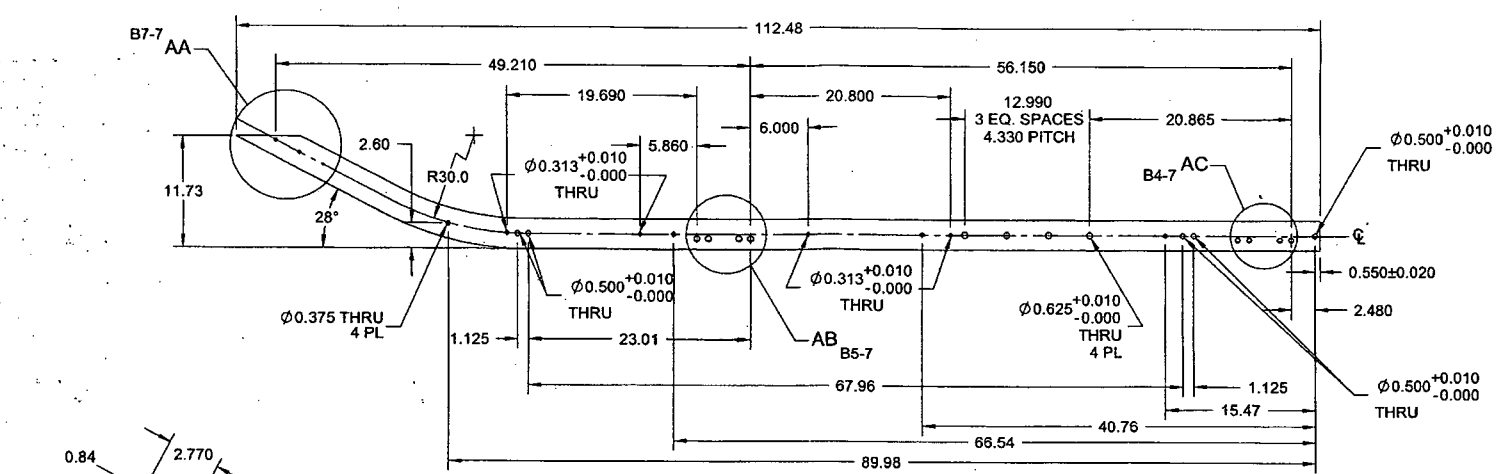
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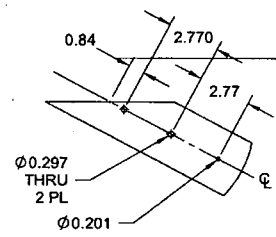
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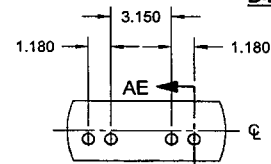
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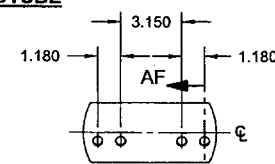
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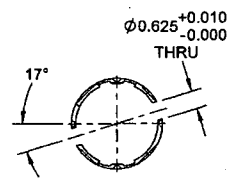
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D7-7



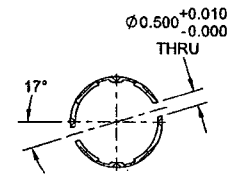
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C4-7
A5-7 AE



DETAIL AC
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D3-7
A3-7 AF



SECTION AE-AE
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SECTION AF-AF
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B4-7

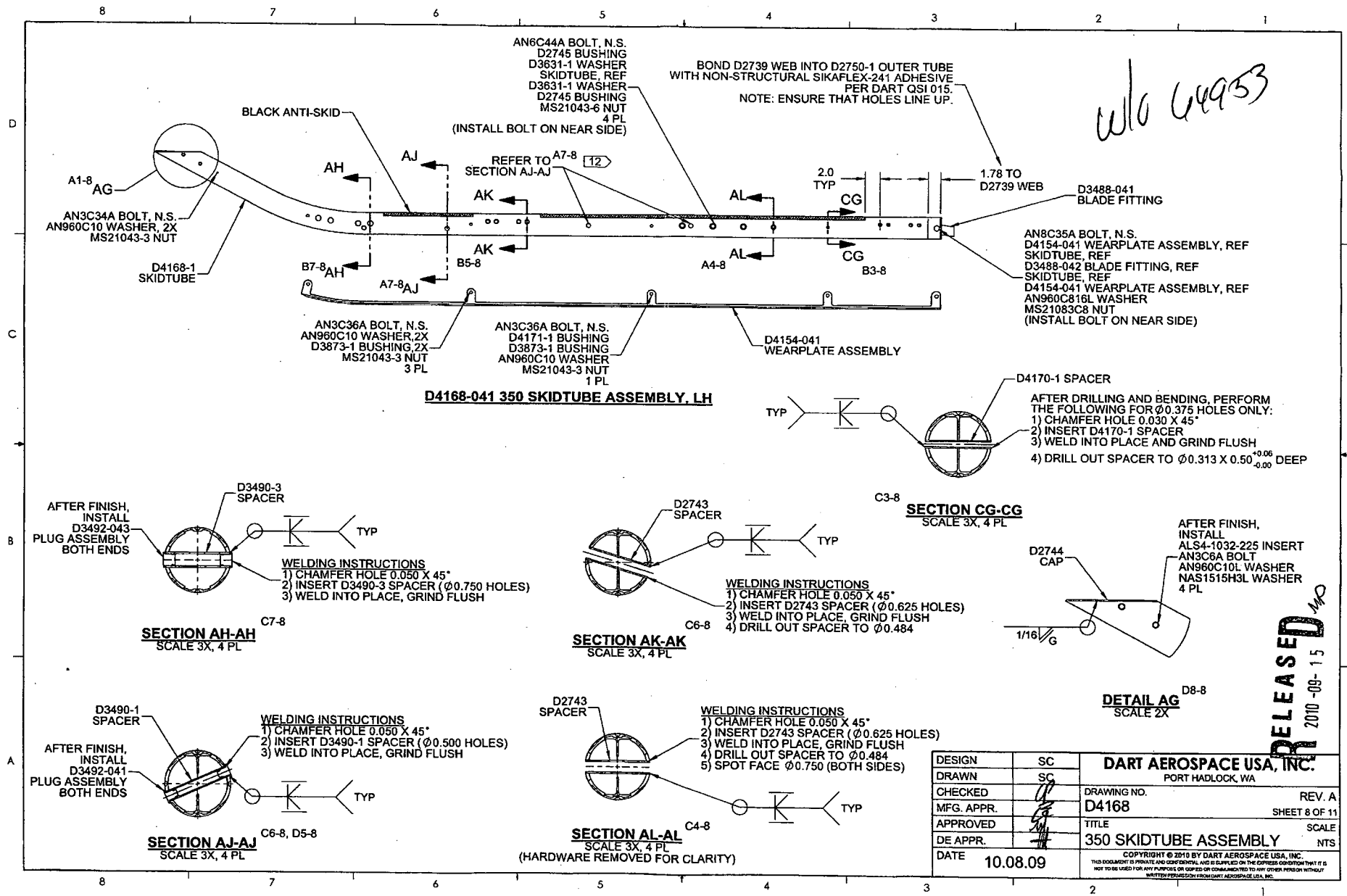
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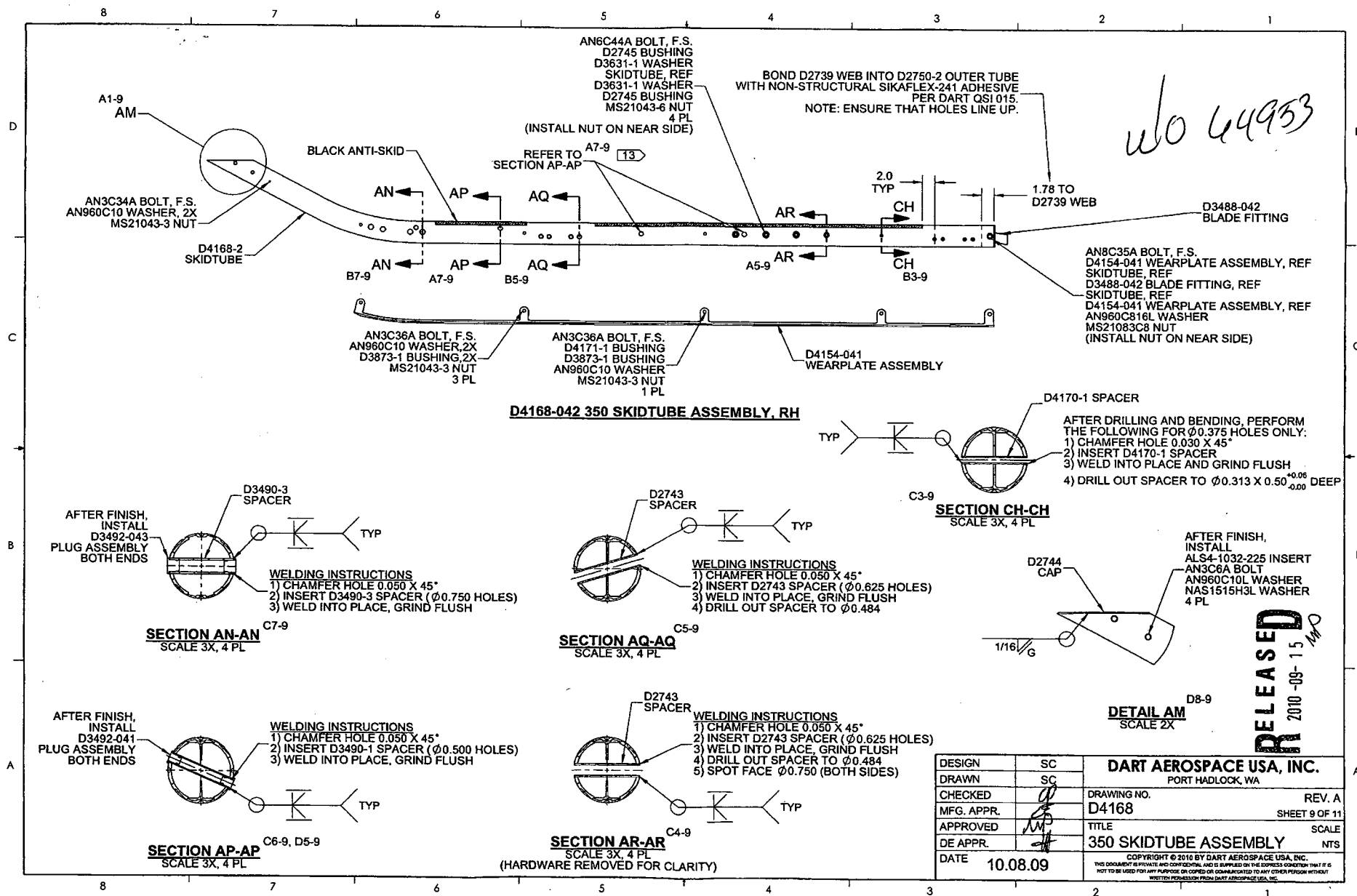
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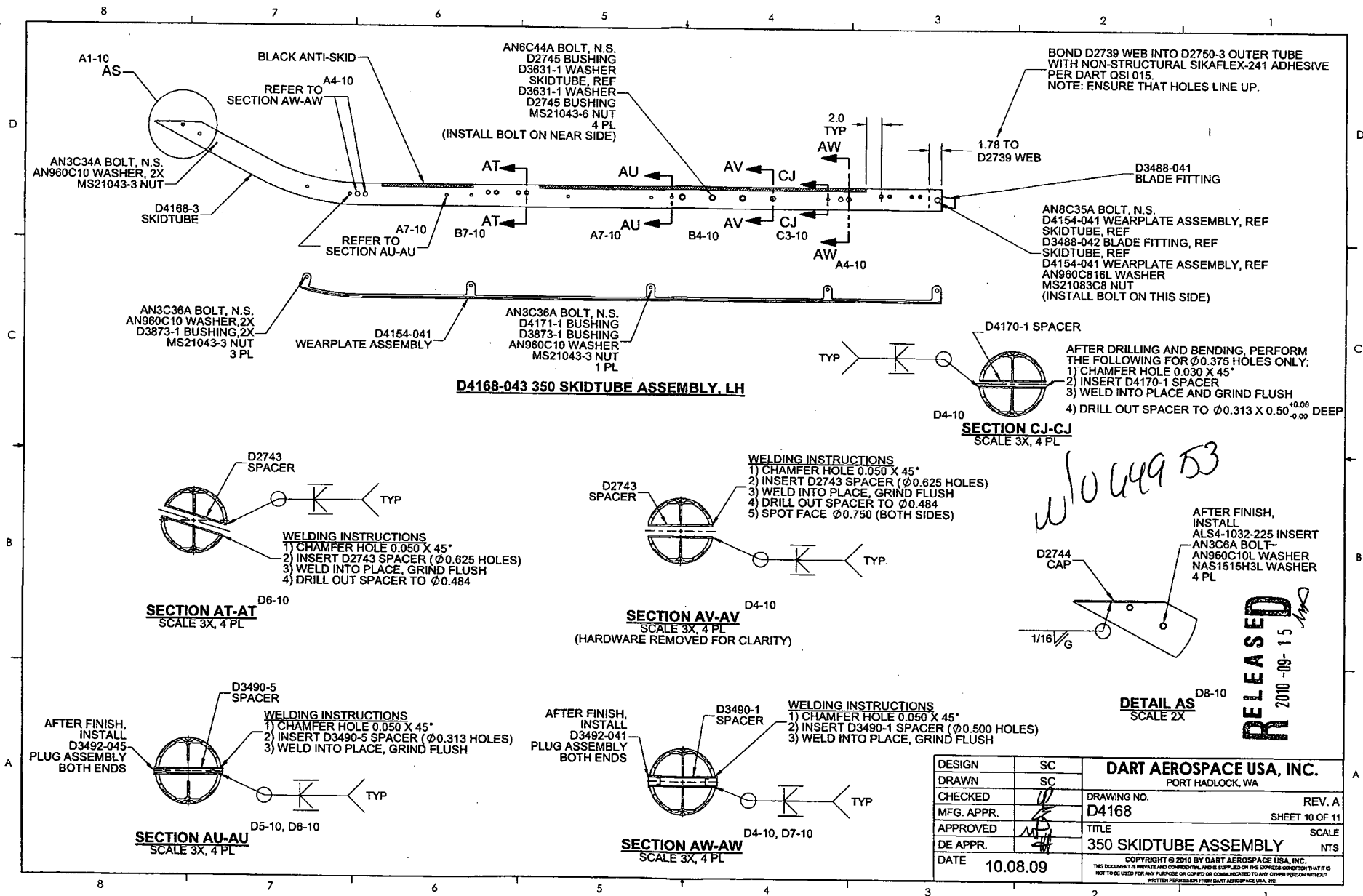
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



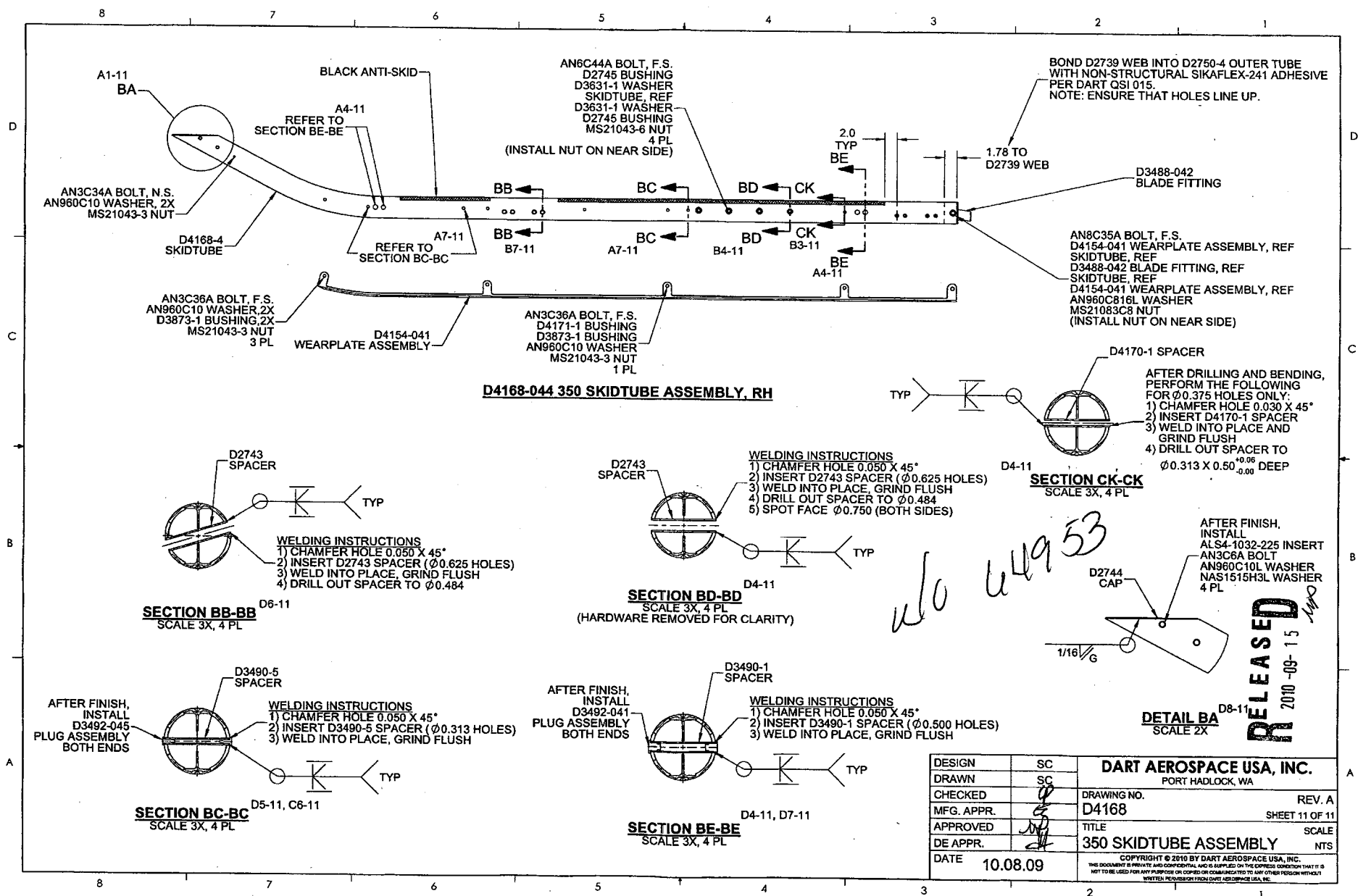
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 243

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barkley Elliott
Job number: ~~64950~~ 64953
Part number: J350-636-016
Description: 350 skid tube
Welding Process: Tig[☒] Mig[],
Base material: Aluminum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Salvatore Date of Test Coupon 11-01-18

Welder Barkley Elliott Date of Test Coupon 11-01-18

The above named individual is qualified in accordance with AWS D17.1.2001 to weld